Goals for the Day & Deliverables

Goals:
1. Elect new Discipline Chairs
2. Best practices: instruction & assessment
3. Creating, revising & archiving courses
4. Create and revise program curricula

Deliverables:
1. Attendance/Roster
2. State Discipline Minutes
3. A course review plan with tasks assigned
Writing assessable learning outcomes
Patricia.Diawara@ppcc.edu

• Assessment of student learning is essential to continuous improvement

• HLC expects institutions to demonstrate a commitment to educational achievement and improvement through ongoing assessment of student learning
  ▪ Clearly stated learning outcomes
  ▪ Assessment processes reflecting good practices
  ▪ Use of assessment results to improve student learning
  ▪ Substantial participation of faculty

Writing assessable learning outcomes

Definitions
• “Tell students what they should learn and faculty what they should teach and assess. They also tell employers, accreditors, colleagues, and other stakeholders what a given class should prepare students to know and do” T. W. Banta

• Short statement that describes what students should be able to do upon completing a learning experience

• Upon completing [course], students should be able to [action verb] + [task]

Examples
• Upon completing GEO 105, students should be able to explain how physical geography influences human society

• Upon completing MAC 245, students should be able to produce 3D solids utilizing the extrude, resolve, sweep, and loft commands
Writing assessable learning outcomes

- **Measurable**: There is at least one task/assignment students can complete as part of the course to demonstrate their learning

- **Meaningful**: Reflect an important skill/ability

- **Manageable**: 5-8 per course

- **Short and simple**: one or two verbs

- **Avoid fuzzy terms** ("demonstrate knowledge", "think critically", "write effectively"): use an action verb that aligns with the assignment
Best Practices in Writing Curriculum and Assessing Student Learning Outcomes
Shelly Ray, PhD

- Professor of Mathematics, Aims Community College
- Former Director of Academic Assessment, Aims Community College
- Independent Learning and Assessment Consultant, Insightful Educator LLC
  - CDHE
  - 2 year and 4 year institutions
- e-Mentoring for Student Success
  - Content Specialist, New Teacher Center
- Reviewer Mathematics Teacher

Shelly.Parsons@aims.edu
What are students learning?

GT Pathways, Competencies and SLOs
- Developed over a two year timeframe through a highly collaborative process.
- Two and four year partners
- AAC&U, CCHE

Important Links
- [https://highered.colorado.gov/Academics/Transfers/gtPathways/Criteria/competency.html](https://highered.colorado.gov/Academics/Transfers/gtPathways/Criteria/competency.html)
Content Criteria: the goals for student learning (Math as an example)

Big ideas for all Mathematics courses that SLOs can be mapped to

Content Criteria for Designating a Mathematics Course as GT Pathways: This course should provide students with the opportunity to / Students should be able to:

a) Demonstrate good problem-solving habits, including:
   ▪ Estimating solutions and recognizing unreasonable results.
   ▪ Considering a variety of approaches to a given problem, and selecting one that is appropriate.
   ▪ Interpreting solutions correctly.

b) Generate and interpret symbolic, graphical, numerical, and verbal (written or oral) representations of mathematical ideas.

c) Communicate mathematical ideas in written and/or oral form using appropriate mathematical language, notation, and style.

d) Apply mathematical concepts, procedures, and techniques appropriate to the course.

e) Recognize and apply patterns or mathematical structure.

f) Utilize and integrate appropriate technology.
Quantitative Literacy

- Students should be able to: 1. Interpret Information (required for GT-MA1, GT-SC1 & GT-SC2)
  - a. Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).

- This SLO is directly mapped to Generate and interpret symbolic, graphical, numerical, and verbal (written or oral) representations of mathematical ideas.

- Next map to the course common learning outcomes (CCCNS) and topic list while creating signature assignments that are deeply linked to the big ideas for assessment purposes.

- Use the rubrics provided and also your institutional rubrics for scoring.

- Provides the ability to use for institutional level, program level, and course level assessment.
Math Pathways

- Implementation
- Co-requisite conversation coming at Fac 2 Fac
- October 26th
- Send the key players to the conversation
Three easy steps:

• **Plan with the end in mind.**
  • Use CLO/SLO as guides.

• **Determine the most effective tool** to measure student learning.
  • Create Key Assignments

• **How will you know they met the learning objective?**
  • Create a rubric or other tool to measure & evaluate student learning.
  • Did you know that GT Pathways competencies/SLOs have rubrics attached to them? See: [https://highered.colorado.gov/Academics/Transfers/gtPathways/Criteria/competency.html](https://highered.colorado.gov/Academics/Transfers/gtPathways/Criteria/competency.html)
Peer Observations

- Did Not Speak
- N/A
- Did Not Speak
Sense Making

It is a natural occurrence
• Some students are just shy.

Relying on stereotypes
• In some cultures, children are taught that it is rude to ask questions.

Race-Neutral explanations
• I have White students who don’t speak.

James.Gray@ccaurora.edu
Don’t know a HIP from a femur?

Robin Schofield
Pikes Peak Community College

Robin.Schofield@ppcc.edu
Characteristics of a HIP

- Challenge
- Feedback
- Real World
- Substantive

- Time
- Reflection
- Public
- Diversity
Teach what we want students to learn

- What do you want the student to learn? (SLO)

- What HIP project or assignment will you use? (Learning Activity)

- Which of the 8 elements are you planning to implement? (HIPs Learning Activities)

- How will your students reflect on their HIPs project experience? (Key to HIP Learning Activities)

- How will students demonstrate the learning (knowledge or skills)? (Learning Activity for Assessment)
Figure 3

General Sequence of the Integrated Course Design Process. The circled numbers indicate the proper sequence of activities in this process: identify the major learning goals (1, 2), use the 3-column table to identify appropriate learning and assessment activities for each goal (3), and then put the activities in a dynamic sequence in the weekly schedule (4).
Colorado Secondary Business Administration Core Build out
Identified 5 classes that seamlessly connect to post-secondary

The HOW?
1. Built Educator advisory committee
2. Created Industry advisory board for finance, accounting, marketing, management and entrepreneurship. Identified competencies.
3. Created framework for 5 “core” classes. Built out class shells in an LMS system.
4. Piloting class this year, we will develop assessments at the end of the pilot year.
5. Update periodically as needed
List of Courses by Discipline with Assigned Tasks (click)

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
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<tr>
<td>1</td>
<td>2018 2:2 Statewide Discipline Meeting</td>
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<td>2</td>
<td>Discipline:</td>
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<td>3</td>
<td>CHAIR:</td>
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<td>7</td>
<td>Review entire list of courses in the prefix-discipline</td>
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<td>8</td>
<td>It is suggested that each Discipline Chair preload this form with all Discipline Courses. Once the conference has finished, submit the completed form to <a href="mailto:denise.mosher@cccs.edu">denise.mosher@cccs.edu</a></td>
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<tr>
<th>Prefix</th>
<th>Number</th>
<th>Title</th>
<th>Credits</th>
<th>Date of review</th>
<th>Status of course</th>
<th>Person Responsible</th>
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Flowchart: Course Approval Process

New course created

- Current Course in CCNS Revised
  - Course Title
  - Description
  - Course Learning Outcomes
  - Topic Outlines

Proposed sent to college VPI with confirmation discipline was consulted

- Proposal returned with rationale to originator
- Proposal returned with rationale to originator

Course distributed to Discipline for preliminary feedback

- Seek input from discipline

College curriculum committee process/review

New & Revised Course Approval Process

*Note: This is a 2-month cycle from the time the VPI submits the course to CCCS for addition onto the next BB.

Colleges forwards to Curriculum Catalog and Scheduling Coordinator at CCCS (Denise Mosher r.cccs.edu).

- Denise confirms discipline was consulted

- Course added to Bulletin Board and proposed in CCNS.
  (*At this point, any submitted courses received by CCCS will go on the next month's Bulletin Board and start the 2-month cycle.)

Bulletin Board goes to SFCC for a quick review and courses get assigned to SFCC and discipline members for editing and formatting to identify any major problems before SFCC votes on each course at its meeting one month later.

Disciplines have 2 weeks to review courses and let Chair know if they approve.

- SFCC reviewers make grammar and other non-substantive edits (email Denise with those edits and she will make them in CCNS).

Discipline chair notifies Denise Mosher @cccs.edu of the Discipline's decision and reviewers notify of any editing/formatting fixes 2 weeks prior to next SFCC meeting.

SFCC votes on courses at its next meeting.

VPIs vote on courses at its next scheduled Curriculum Approval Phone Call after SFCC.

- Course sent back to VPI who submitted it for review/change.
  - VPI is responsible for resubmission. Discipline Chair will also be notified by Denise.

- Course sent back to SFCC for review

If Provost agrees, CCCS makes proposed courses active, notes final outcomes in Bulletin Board, posts it on CCCS website and sends out to colleges.

Revised: September 14, 2018
Denise Mosher
Curriculum, Catalog and Scheduling Coordinator

* Phone: 720-858-2368
* denise.mosher@cccs.edu

Questions about...
* Common Course Numbering System (CCNS)?
* Course Guide Templates?
* Catalog? * Bulletin Board? * Program Approval?
## GT Pathways Re-Approval Due Dates

<table>
<thead>
<tr>
<th>GT Pathways Category</th>
<th>System Submission Due Date</th>
<th>CDHE Submission Due Date (completed by System)</th>
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<tbody>
<tr>
<td>GT-CO1, CO2 &amp; CO3 and GT-MA1</td>
<td></td>
<td>February 28, 2017</td>
</tr>
<tr>
<td>GT-SC1 (BIO, CHE, PHY)</td>
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<td>May 15, 2017</td>
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<tr>
<td>GT-SC1 (all) &amp; SC2</td>
<td></td>
<td>November 24, 2017</td>
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<tr>
<td>GT-AH1 and GT-AH3</td>
<td></td>
<td>May 15, 2018</td>
</tr>
<tr>
<td>GT-AH2 and GT-AH4</td>
<td>September 5, 2018</td>
<td>November 24, 2018</td>
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<tr>
<td>GT-H11 and GT-SS1</td>
<td>March 5, 2019</td>
<td>May 15, 2019</td>
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<tr>
<td>GT-SS2 and GT-SS3</td>
<td>September 5, 2019</td>
<td>November 24, 2019</td>
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### CDHE’s GT Pathways Database

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Department</th>
<th>Course Title</th>
<th>Units</th>
<th>Approval Date</th>
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<tr>
<td>GT-MA1</td>
<td>CCCS</td>
<td>Mathematics for the Liberal Arts</td>
<td>4.00</td>
<td>08/01/2003</td>
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<tr>
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<td>MAT</td>
<td>College Algebra</td>
<td>4.00</td>
<td>01/10/2003</td>
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<td>CCCS</td>
<td>College Trigonometry</td>
<td>3.00</td>
<td>08/01/2005</td>
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<tr>
<td></td>
<td>MAT</td>
<td>Finite Mathematics</td>
<td>4.00</td>
<td>08/01/2005</td>
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<tr>
<td></td>
<td>CCCS</td>
<td>Survey of Calculus</td>
<td>4.00</td>
<td>08/01/2003</td>
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<tr>
<td></td>
<td>MAT</td>
<td>Introduction to Statistics</td>
<td>3.00</td>
<td>08/01/2003</td>
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</table>
CCNS Course Templates (click)

- CCNS Course Template Information

2016-2017 Classification of Instructional Programs Chart (CIP code)

Blooms Taxonomy Action Verbs

CCNS Course Submission Template - general

CCNS Course Submission Template CTE

CCNS Course Submission template gtPathway

FAQs CCNS Course submission

FAQs CCNS Course submission

FAQs CCNS Course submission

Flowchart-New Revised Course Approval Process

Variable Credit Courses
### Required GT Pathways Syllabus

**Language**

#### GT-AH1 Arts & Expression

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>GT-AH1 World Languages</td>
<td>Must be Intermediate/200-level Resid. Credits</td>
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#### GT-AH2 Literature and Humanities

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<th>Course Title</th>
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<tbody>
<tr>
<td>GT-AH2 Introductory Writing Course</td>
<td>Resid. Credits</td>
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#### GT-AH3 Ways of Thinking

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<th>Course Title</th>
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<td>GT-AH3 Intermediate Writing Course</td>
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#### GT-AH4 World Languages

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<tr>
<td>GT-AH4 World Languages</td>
<td>Must be Intermediate/200-level Resid. Credits</td>
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#### GT-CO1 Introductory Writing Course

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<th>Course Title</th>
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<td>GT-CO1 Introductory Writing Course</td>
<td>Resid. Credits</td>
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#### GT-CO2 Intermediate Writing Course

<table>
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<tbody>
<tr>
<td>GT-CO2 Intermediate Writing Course</td>
<td>Resid. Credits</td>
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Competencies for Statewide Guaranteed Transfer – GT Pathways Curriculum

Competencies revised by faculty (2014-2016), and approved by the CCHE (June 2, 2016); effective date - Fall 2016.

- GT Pathways Matrix of Required Content Criteria and Competencies with Student Learning Outcomes
  - Civic Engagement
  - Creative Thinking
  - Critical Thinking
  - Diversity & Global Learning
  - Information Literacy
  - Inquiry & Analysis
  - Oral/Presentational Communication
  - Problem Solving (for future adoption by GT-MA1)
  - Quantitative Literacy
  - Written Communication